

PhD/Research Fellow (f/m/d): Biomedical Visualization and Web Based Visual Analytics for Neuroscience

[VRVis](#) is seeking a skilled and creative mind to join our successful team of researchers developing Visual Computing Solutions for Biomedical Image Management, Interactive Analysis, Mining and Visualization in the course of the DFG/FWF project Larvalbrain 2.0. The project is undertaken by the [Biomedical Image Informatics Group at VRVis](#) in Vienna, Austria, in cooperation with the [Merhof Lab at RWTH Aachen](#) (Image Registration) and the [Thum Lab at University Leipzig](#) (Neuroscience), both in Germany.

Larvalbrain 2.0 aims at providing advanced and novel solutions for the management, web based interactive analysis, mining and visualization of neuroscientific data (see below for further info).

Your research topics will cover

- Multi-resolution spatial indexing methods for imaging data and spatial neural object data
- Semantic linking and interactive query methods across multi-resolution spatial data
- Visualization and mining methods for multi-layered and multi-resolution neural circuit data as well as for behavioral and functional data

The required software development in context of Larvalbrain 2.0 does not start from scratch. We have a mature framework for the management, mining and visualization of data for neuroscientific data that is in use by neuroscientists in research and industry. You will be embedded in the highly ambitious and skilled team working on it. Your developments will build upon this framework, to be evaluated and finally used by our partners from neuroscience.

Your work is characterized by a high level of independent problem solving and creative thinking, coupled with a good team spirit and excellent communication skills. Depending on your qualification, project management tasks and/or supervision of students may be assigned to you. As research institute, VRVis actively supports the publication of your excellent research results at scientific conferences and renowned journals. In case you do not yet own a PhD, there is the opportunity to pursue a PhD at TU Wien.

Minimum qualification

- PhD or Master's degree in Computer Science, Bioinformatics or a related field
- Strong background in Visual Computing, i.e. (biomedical) visualization, computer graphics, and interactive visual analytics
- Strong programming skills with a particular focus on web development. Experience with javascript/react.js are a plus.
- Additional knowledge in database design, graph analysis and/or image processing would be an advantage
- Curiosity and willingness to think out of the box and to dive deep into cutting edge neuroscience research, working closely together with our partners in Germany.
- Ability to work in an international and diverse team as well as independently
- Excellent communication and scientific writing skills

What we offer in return

- Open-ended contract, up to 40 hours per week
- Flexible working hours, well-equipped workplace
- Possibility to travel to international conferences
- Location: Vienna, Austria; easily accessible office by means of public transport
- Salary according to collective labor agreement (IT-Kollektivvertrag) including bonus for 13th and 14th month, monthly min. 3094,- EUR with overpay depending on qualification and previous professional experience
- Supportive atmosphere in an inclusive team in the #1 city to live in worldwide



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Application deadline: 14.03.2021

We especially encourage female candidates to apply, for we wish to actively counter the lack of female researchers in the visual computing field. Therefore, in cases of equal qualification, preference is given to female candidates.

Please forward your application documents using "Larvalbrain" as subject line to:

Contact

Franziska Steyer-Beerman (HR)

fsb@vrvis.at

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More about the Larvalbrain 2.0 project

Larvalbrain 2.0 aims at providing advanced and novel solutions for the management, web based interactive analysis, mining and visualization of neuroscientific data. Some older results of a previous project are openly accessible via

www.larvalbrain.org to give a first impression on our work. Additional information can be found at

<https://www.vrvis.at/en/products-solutions/solutions/life-science> and at

<https://www.vrvis.at/en/research/research-topics/neuroscience-visual-computing-data-science-and-big-data>